

Figure 1 Simple implementation of the ultrasonic loudspeaker

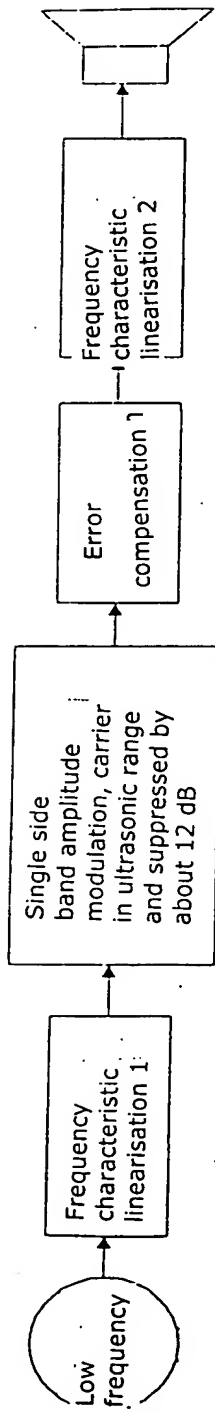


Figure 2 Improved circuit of the ultrasonic loudspeaker

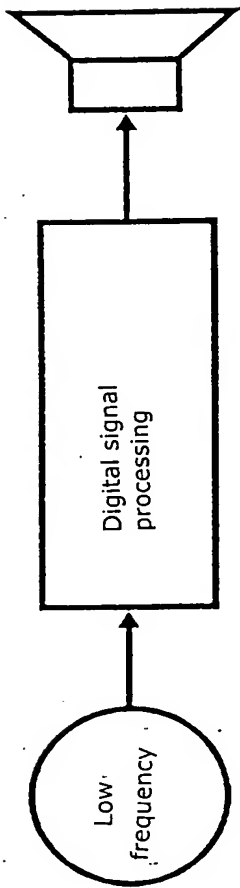
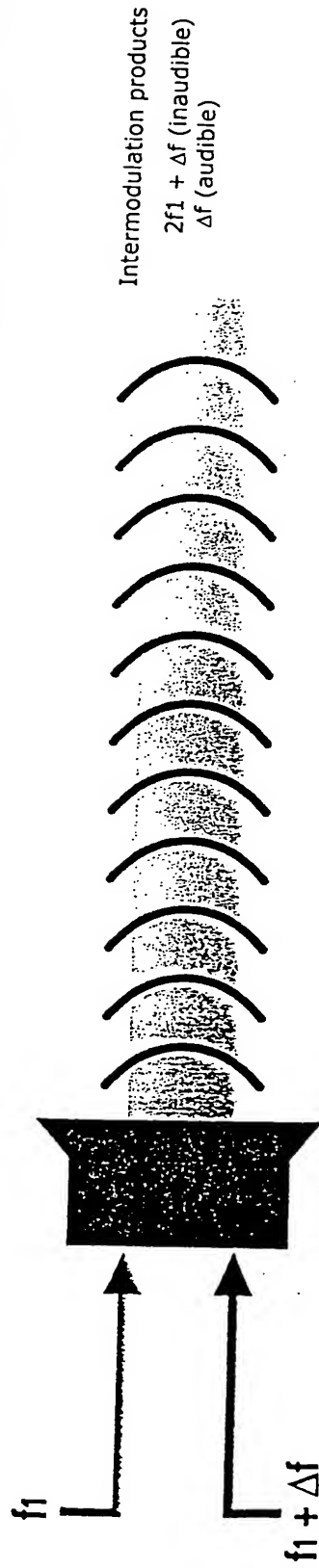


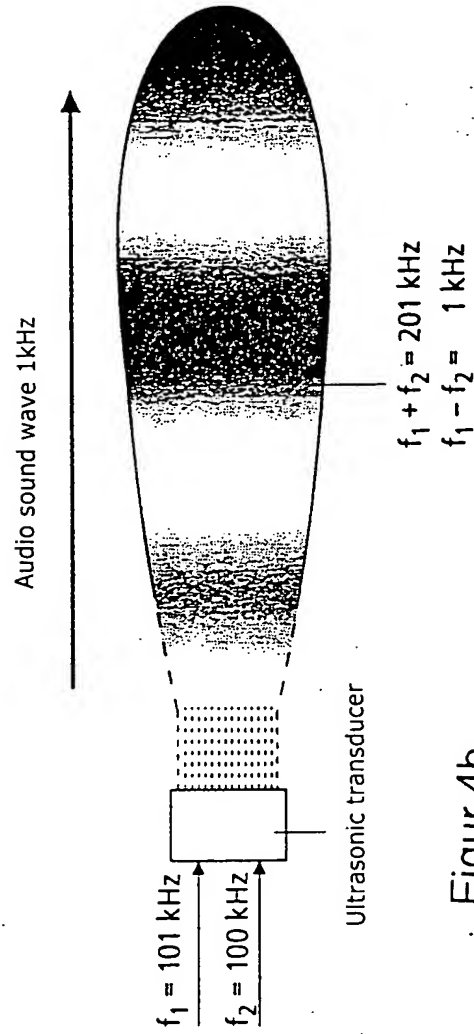
Figure 3 Transmission path embodied with digital signal processing (DSP)



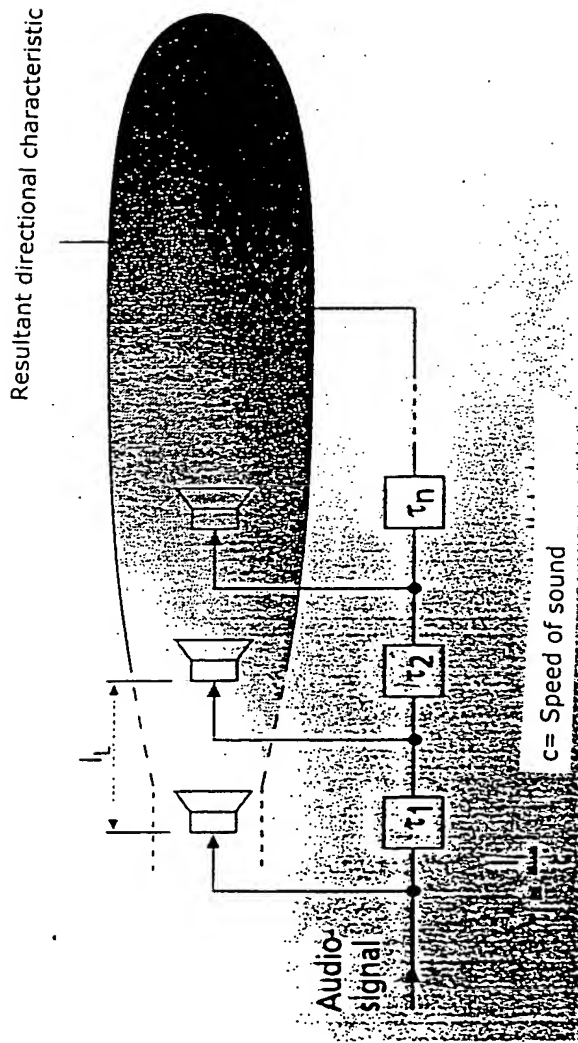
$f_1$  = Carrier frequency (ultrasound at constant amplitude)

$\Delta f$  = audio signal

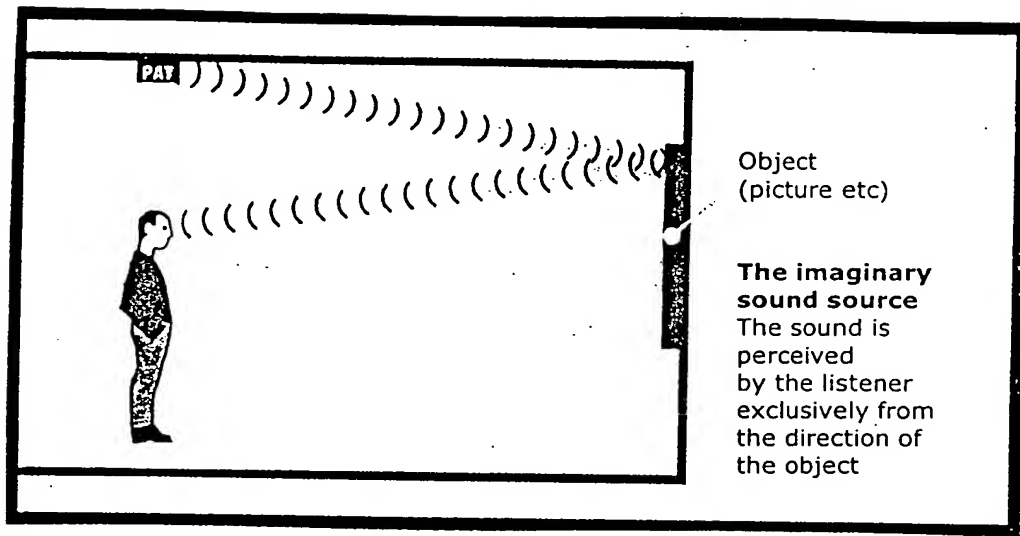
Figur 4a



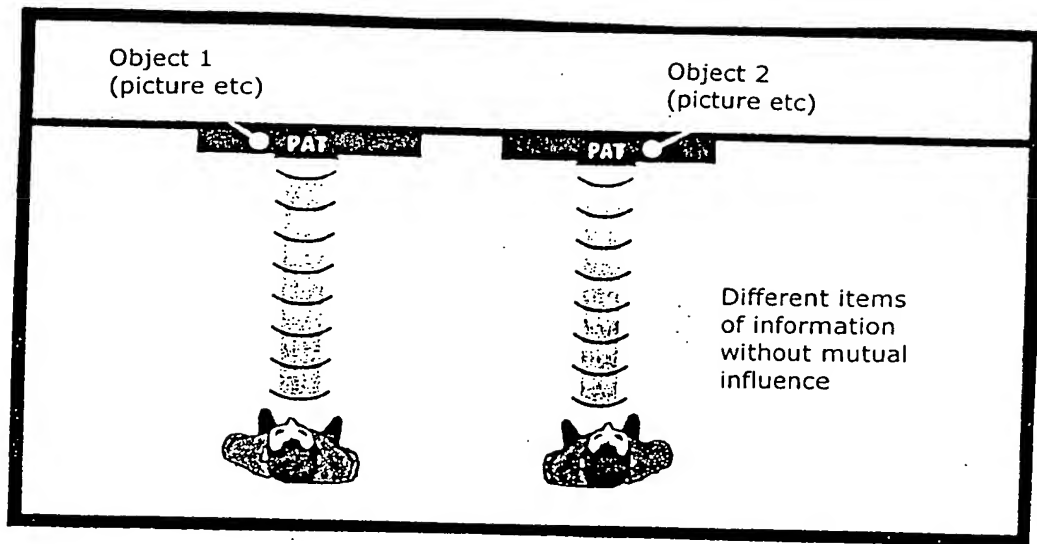
Figur 4b



Figur 5



Figur 6a



Figur 6b

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